Federal Aviation Administration National Simulator Program, AFS-205 Four Major Areas of FSTD Qualification Criteria for New and Variant Aircraft

- 1. **Purpose**. The National Simulator Program (NSP) is responsible for the qualification of Flight Simulation Training Devices used in FAA approved training programs. The NSP must ensure the FSTD replicates the aircraft and is able to perform the maneuvers and procedures required for training, testing and checking of airmen.
- 2. **FSTD Qualification Criteria**. To accomplish this, four major areas of FSTD Qualification Criteria must be met.
 - a. The FSTD must meet the qualification standards described in the appropriate FAA Regulation and FSTD qualification document (i.e. 14 CFR, Part 121, Appendix H and Advisory Circular 120-40B).
 - b. The FSTD must replicate the aircraft described in the FAA Type Certificate for the aircraft.
 - c. The FSTD must be able to perform the maneuvers and procedures required for training, testing and checking of airmen described in the FAA Flight Standardization Board (FSB) Report for the aircraft.
 - d. The NSP personnel performing the evaluation must possess the necessary knowledge of the aircraft. For example:
 - i. The NSP Aerospace Engineer, working with the assistance of the aircraft manufacturer and the FAA Aircraft Certification Office is able to gain sufficient knowledge of the aircraft to review and approve the FSTD Qualification Test Guide and evaluate the FSTD aerodynamic model.
 - ii. The NSP Inspector, through flying the actual aircraft, is able to gain sufficient knowledge of the aircraft to conduct the subjective evaluation of the FSTD.
- 3. The attached table list the means to satisfactory meet the four criteria.

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FSTD Qualification Criteria Matrix

To conduct the FSTD evaluation, a method listed under each qualification criteria must be met.

a. Qualification Standards	b. FAA Type Certificate	c. Knowledge of FSB Requirements	d. NSP Inspector Flight Experience ¹
1. The sponsor certifies the FSTD meets the standards listed in the appropriate FAA Regulation and Advisory Circular.	The aircraft has received an FAA Type Certificate or an amended Type Certificate.	1. The FSB Report has been Approved by AFS-200.	1. The NSP Inspector served as a member of the FSB.
2. The sponsor certifies the FSTD meets the standards listed in the appropriate FAA Regulation and an established Alternate Means of Qualification approved by the NSP Manager.	2. The members of the FAA Simulator Evaluation Team ² agree there is an adequate amount of systems information, performance data, operational knowledge, and/or flight experience with both the simulator and the aircraft and the device receives qualification in accordance with FSTD Guidance Bulletin Qualification 04-01	2. The NSP Inspector served as a member of the FSB and has gained sufficient knowledge of the training, checking and testing requirements for the aircraft.	2. The NSP Inspector received adequate aircraft training, including flight time, provided by the aircraft manufacturer or the FSTD sponsor.
3. The sponsor certifies the FSTD meets the standards listed in the appropriate FAA Regulation and an individual Alternate Means of Qualification approved by the NSP Manager.	N/A	3. The NSP Inspector has been sufficiently briefed by the FSB Chairperson on the training, checking and testing requirements for the aircraft and obtains a copy of the draft FSB Report.	3. The NSP inspector is current and proficient in the actual aircraft by another means, i.e. military pilot or industry pilot.

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¹ The NSP Aerospace Engineer, working with the assistance of the aircraft manufacturer and the FAA Aircraft Certification Office is able to gain sufficient knowledge of the aircraft to review and approve the FSTD Qualification Test Guide and evaluate the FSTD aerodynamic model.

² The Simulator Evaluation Team (SET) is described in FSTD Qualification Guidance Bulletin 04-01.